



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,104	12/02/2003	Klaus Eschenroeder	13913-120001 / 2003P00250	4399
32864	7590	05/01/2007	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			CAO, DIEM K	
			ART UNIT	PAPER NUMBER
			2194	
			MAIL DATE	DELIVERY MODE
			05/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/727,104

Applicant(s)

ESCHENROEDER ET AL.

Examiner

Diem K. Cao

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-13 and 19-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims 1-13 are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer readable medium is defined as a “*wave*” (such as a carrier wave). In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention.

Claims 19-22 are directed to system or apparatus claims, however, bodies of the claims fail to recite any physical article or object to meet the requirement of being manufacture or system claims.

See MPEP 2106-2107.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

Art Unit: 2194

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 10, 12-13, 18 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Morshed et al. (U.S. 6,721,941 B1).

As to claim 10, Morshed teaches

- receiving a specification of a predetermined condition (event registration ... in the software application; col. 35, lines 34-38),
- upon the occurrence of the predetermined condition, collecting process data items associated with a component (control is passed to the monitor DLL ... server system; col. 35, lines 62-65), and
- transferring the process data items to a central system (The monitor process 1032 receives information ... to the collector 1034; col. 36, lines 13-22) operable to reconstruct a process instance based on the process data items (graphical display of a process ... in a session data file including correlation session data; col. 52, lines 20-39).

As to claim 12, Morshed teaches receiving a specification of a second predetermined condition (inherent from event registration for event to monitor when an outgoing call or RPC is made; col. 35, lines 34-38 and 45-47), and upon the occurrence of the second predetermined condition, collecting additional process data items associated with the component (inherent from control is passed to the monitor DLL ... server system; col. 35, lines 62-65).

As to claim 13, Morshed teaches receiving a specification of a second component (a first server event ... received; col. 39, lines 48-52), upon the occurrence of another predetermined condition, collecting other process data items associated with the second component (when this request ... sent from the client system; col. 54-58), and transferring the other process data items to the central system (inherent from "similar to the client software ... collector process 1044"; col. 39, lines 32-36 and col. 46, lines 26-30).

As to method claim 18, it is the same as the computer product claim 10 and is rejected under the same ground of rejection.

As to system claim 22, it is the same as the computer product claim 10 and is rejected under the same ground of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-9, 14-17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morshed et al. (U.S. 6,721,941 B1) in view of Johnson (The Application Response Measurement (ARM) API, Version 2).**

As to claim 1, Morshed teaches

- receiving process data item (the monitor process 1032 communicates the transmitted data to the collector; col. 36, lines 18-22), each process data item having been collected by a monitor DLL (control is passed to the monitor DLL to perform certain functions, such as retrieve additional information that may have been communicated from the server system; col. 35, lines 62-65 and col. 36, lines 13-22),
- for each process data item, identifying a process instance with which the process data item is associated (each monitor process ... the process identifier of the corresponding instrumented process ... data collection; col. 38, lines 34-42),
- grouping the process data items that are associated with a first process instance into a first group (a collector creates a session record for each process executing in the system for which execution information is gathered; col. 46, lines 17-19, and correlation data collection; col. 38, lines 41-42), and
- generating a reconstruction of the first process instance based on the process data items in the first group (graphical display of a process ... in a session data file including correlation session data; col. 52, lines 20-39).

Morshed does not teach an agent. However, Morshed teaches a monitor DLL collect data from executing process (col. 35, lines 62-65). Johnson teaches an agent collected data from executing process (an agent, which measures and monitors the transactions, and makes the information available to management application; page 1, last paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Johnson to the system of Morshed because using agent, which

is a program that has given small and well-defined task, or a DLL to perform data collection is just different implementation that can be used by software developer, and the agent's approach will minimizing application delays and minimizing system overhead (page 7, paragraphs 1-3).

As to claim 2, Johnson teaches modeling a process based on the reconstruction of the first process instance (an application could have a few critical sessions redesigned; page 2, last paragraph).

As to claim 3, Morshed does not explicitly teach monitoring the first process instance based on the reconstruction of the first process instance. However, Morshed teaches execution information gathered is used to improve program reliability and performance (col. 34, lines 47-49), and Johnson teaches based on the data information gathered, administrators can determined where and why natures of the problems, and solve the problems so the application or environment can be tuned to perform better, which include modify the application (page 2, last paragraph). It would have been obvious to one of ordinary skill in the art that continuing monitoring the application after the application is modified to check whether the problem has been solved.

As to claim 4, Morshed teaches wherein the process data items are collected by the agent upon the occurrence of a predetermined condition (col. 34, lines 57-59 and col. 35, lines 34-44). Morshed does not explicitly teach wherein monitoring the first process instance comprises modifying the predetermined condition. However, Johnson teaches the application (process) has

Art Unit: 2194

been modified (page 2, last paragraph). It would have been obvious to one of ordinary skill in the art that the predetermined condition may be change in response to the changes in the process/application.

As to claim 5, Morshed teaches wherein the process data items have a first type (information about calling function included in the client process; col. 36, lines 3-6). Morshed does not explicitly teach wherein monitoring the first process instance further comprises specifying a second type of process data item for the agent to collect. However, Morshed as modified by Johnson teach the agent can collect multiple types of data (col. 34, lines 40-47). It would have been obvious that different type of data is being collected in the process of improve the performance of the application/process.

As to claim 6, Morshed as modified teaches the agent is associated with a first tracking point (event, occurrence of particular events; col. 35, lines 34-48), and wherein monitoring the first process instance further comprises specifying a second tracking point with which to associated with the agent (a second event ... return from an outgoing or remote procedure call; col. 35, lines 57-60).

As to claim 7, Morshed as modified teaches the agent is associated with a first tracking point (event, occurrence of particular events; col. 35, lines 34-48), and wherein monitoring the first process instance further comprises specifying a second tracking point with which to associated a second agent (a first server event ... received; col. 39, lines 39-52).

As to claim 8, Morshed as modified teaches generating a reconstruction of a second process instance based on the process data items in a second group, and wherein modeling the process is further based on the reconstruction of the second process instance (graphical display of a process ... in a session data file including correlation session data; col. 52, lines 20-39).

As to claim 9, Morshed as modified by Johnson (regarding agent in claim 1)

- receiving additional process data item, each additional process data item having been collected by a second agent (col. 36, lines 18-22),
- for each additional process data item, identifying a process instance with which the additional process data item is associated (each monitor process ... the process identifier of the corresponding instrumented process ... data collection; col. 38, lines 34-42), and
- grouping the additional process data items that are associated with the first process instance with the first group (a collector creates a session record for each process executing in the system for which execution information is gathered; col. 46, lines 17-19, and correlation data collection; col. 38, lines 41-42) ().

As to method claim 14, see rejection of claim 1 above. Morshed further teaches central system (collector 1034; col. 36, lines 13-22).

As to method claim 15, it is the same as the computer product claim 1 and is rejected under the same ground of rejection.

As to claims 16-17, see rejections of claims 2-3 above.

As to apparatus claim 19, it is the same as the computer product claim of claim 1 and is rejected under the same ground of rejection.

As to claims 20-21, see rejections of claims 2-3 above.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morshed et al. (U.S. 6,721,941 B1) in view of Leymann et al (U.S. 6,633,908 B1).

As to claim 11, Morshed does not teach the operation of collecting the process data items occurs without modifying the component. However, Leymann teaches the operation of collecting the process data items occurs without modifying the component (col. 3, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Leymann to the system of Morshed because Leymann's method will allow all applications (existing or newly written), including applications that the source code is owned by another organization or is no longer available, can be measured without any effort by the application provider (col. 3, lines 1-4 and lines 23-25).

Conclusion

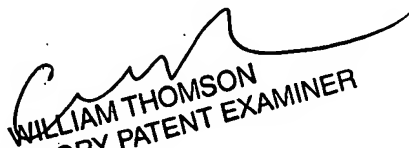
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 8:30AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC
April 16, 2007


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER